

<b>Notice of Allowability</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/658,275		SOLINSKY, JAMES C.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Juan C. Ochoa		2123	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/30/07.
2. ☒ The allowed claim(s) is/are 1-38 and 40-60.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|--|---|

### **DETAILED ACTION**

1. Examiner Ayal I. Sharon is no longer prosecuting this application. Examiner Juan Carlos Ochoa is taking over the prosecution of this application. Claims 1-38 and 40-60 of U.S. Application 09/658,275, originally filed on 09/08/2000, are currently pending. The amendment filed 10/30/07 has been received and considered.
2. The application claims benefit of provisional application 60/215,762, filed 6/30/2000.

### **Examiner's Amendment**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
4. Authorization for this examiner's amendment was given in a telephone interview with Michael Shea on 1/29/08.
5. The application has been amended as follows:
6. Claim 9 line 2, the term "simulation" has been replaced with the word -- stimulation--.
7. Claim 9 line 10, the term "simulation" has been replaced with the word -- stimulation--.
8. Examiner notes that the term "simulation" was not enabled by the application description. Claim 9 has been amended to circumvent 112 issues.

**Allowable Subject Matter**

9. Claims 1-38 and 40-60 are allowed over prior art of record.

10. The following is an examiner's statement of reasons for allowance:

11. While Vachtesvanos et al. U.S. Patent 6,650,779 discloses a multiple-input/single-output neural network obtained by linearly combining several wavelets. The wavelet parameters are taken incrementally from a predefined space-frequency grid of orthogonal wavelets. This approach prescribes learning as a multi-resolution, hierarchical procedure, and brings about the possibility of a type of network growth. The essence of multi-resolution learning is that a function can be approximated to arbitrary precision by starting with a coarse approximation at some resolution, and then successively adding layers of detail at higher resolutions. Higher resolution wavelet nodes are added to areas of the input space where the existing nodes contribute the largest errors (see col. 15, lines 48-67),

Brooks, Juliana H. J. U.S. Patent 6,898,299 discloses that when an individual presses his forehead against a detector band and says his name out loud, the electroencephalographic pattern produced will be unique based on the electrical patterns produced in multiple areas of the brain such as the motor areas, sensory areas, speech centers, and emotional centers. This will produce a unique pattern of electric field amplitudes and polarizations at the detector band (see col. 53, lines 54-61),

Hoffberg et al. U.S. Patent 6,400,996 discloses that in interacting with the apparatus,

the user first identifies himself/herself to the machine, which can occur in a number of ways ... by voice pattern recognition, speaker independent voice recognition, video pattern recognition, fingerprint, retinal scan, or other biometric evaluation ... The interface, upon identifying the user, retrieves information regarding the user, which may include past history of use, user preferences, user sophistication, patterns of variation of user, which may be based on, e.g., time, mood, weather, lighting, biometric factor or other factors (see col. 115, line 60 to col. 116, line 14),

Ellingson, John F. U.S. Patent 6,871,287 discloses a system for verifying identities comprising an enrollment system having: (i) at least one alphanumeric input device; (ii) at least one biometric input device; (iii) at least one header file database having a plurality of identities; (iv) at least one search engine, said search engine in communication with said header file database such that said search engine receives an alphanumeric data signal which has been input into said alphanumeric input device by the user, and then searches said database for identities that match the alphanumeric data according to a predetermined first set of criteria; (v) a processor to score the set of identities matched by said search engine according to a predetermined second set of criteria, said processor capable of determining the acceptability or unacceptability of said user's input alphanumeric data based on said score; and (vi) an identity escrow database which is in communication with said processor and receives from said unit an approved identity data signal based on the acceptability of the score, said escrow database additionally in communication with said biometric input device capable of receiving at least one biometric identity data signal input by the user to said biometric

input device, said escrow database further comprising means for coupling the approved identity data signal and the biometric identity data signal to create at least one subfile within the escrow database for each user comprising the approved identity data signal and the biometric data signal (see col. 3, line 46 to col. 4, line 6), and Estes, Mark D. U.S. Patent 5,729,754 discloses a class of control systems characterized as having deterministic objectives of control, i.e., intentionality, by means of an interactive presentation mechanism which corresponds to an adaptive, combinatorially articulated representation mechanism (see col. 7, lines 57–62), none of these references taken either alone or in combination with the prior art of record disclose generating outputs specifically including:

claims 1, 9, 17, 25, and 60 "generating a user memory model representation of the synthesized user inputs, the model comprising objects and object links in a partially orthogonal N-dimensional object space",

claim 33 "user memory model-based response generation from the captured user inputs with correlated congruence to two or more data input channels; storing the model representation of the synthesis generation as mapped into a partially orthogonal N-dimensional representation",

claim 35 "generating a model comprising objects and object links in a partially orthogonal N- dimensional object space, the model representing a synthesis of the simultaneous user inputs; mapping the N-dimensional object space to one or more M-dimensional sub-spaces to compare the model representing the synthesis of the simultaneous user inputs to subsequently received simultaneous user inputs",

claim 36 "generating a model comprising objects and object links in an N-dimensional object space, the model representing a synthesis of the simultaneous user inputs, wherein the objects include objects of two or more different object classes; mapping the N-dimensional object space to one or more M-dimensional sub-spaces to compare the model representing the synthesis of the simultaneous user inputs to subsequently received simultaneous user inputs",

claim 52 "storage for storing a model comprising objects and object links in a partially orthogonal N-dimensional object space, the model representing a synthesis of the simultaneous user inputs; a processing system for mapping the N-dimensional object space to one or more M- dimensional sub-spaces to compare the model representing the synthesis of the simultaneous user inputs to subsequently received simultaneous user inputs",

and claim 57 "storage for storing a model comprising objects and object links in an N-dimensional object space, the model representing a synthesis of the simultaneous user inputs, wherein the objects include objects of two or more different object classes; a processing system for mapping the N-dimensional object space to one or more M-dimensional sub-spaces to compare the model representing the synthesis of the simultaneous user inputs to subsequently received simultaneous user inputs",

in combination with the remaining elements and features of the claimed invention. Also, there is no motivation to combine these references to meet these limitations. It is for these reasons that applicant's invention defines over the prior art of record.

12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

13. Applicant's arguments filed 10/30/07 have been fully considered, and they are persuasive.

14. Regarding the rejections under 112, Applicant's arguments have been considered and the rejections are withdrawn.

15. Regarding the rejections under 101, the amendment corrected all deficiencies and the rejections are withdrawn.

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan C. Ochoa whose telephone number is (571) 272-2625. The examiner can normally be reached on 7:30AM - 4:00 PM.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Application/Control Number:  
09/658,275  
Art Unit: 2123


Page 8

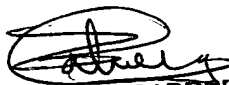
published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*  11/30/08

  
ZOILA CABRERA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100

2/1/08